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Hamilton-Wentworth

1998

Health Issues Report

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GOVERNMENT DOCUMENTS

**HAMILTON-WENTWORTH REGIONAL
PUBLIC HEALTH DEPARTMENT**

*A Teaching Health Unit
Affiliated with McMaster University
and the University of Guelph*

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Highlights from the Hamilton-Wentworth 1998 Health Issues Report



- Between 1996 and 2021, Hamilton-Wentworth's population is expected to increase by 48% (from 467,799 to 691,538). The percent of population 65 years and over will increase.
- Compared to other Central West Ontario districts, Hamilton-Wentworth has the highest percent of low income families (19%), lone-parent families (15%) and youth unemployment (19%).
- Cardiovascular disease (78,323 days) and mental disorders (41,707 days) account for the two largest number of days spent in hospital by Hamilton-Wentworth residents in 1996.
- Heart disease is still the number one killer of both men and women in Hamilton-Wentworth. However, heart disease death rates in Hamilton-Wentworth have been declining since 1981.
- Lung cancer has recently joined breast cancer as a leading cause of cancer death among Hamilton-Wentworth women. The increase in lung cancer death among women corresponds to an increase in female tobacco use.
- Deaths due to injury (209) among Hamilton-Wentworth residents were most often caused by falls (26%), suicide (23%) and motor vehicle collisions (15%) in 1995. Injuries also accounted for 2,672 hospital admissions, 34,315 days in hospital, and an estimated \$21,755,710 of hospital costs in Hamilton-Wentworth in 1995.
- Self-reported tobacco use was notably higher among a sample of Hamilton secondary school students (Males: 42%; Females: 41%) compared to Ontario students (Males: 30%; Females: 35%).
- Hamilton-Wentworth residents aged 12 years and over reported consuming an average of 38% of their daily energy intake from fat (the recommended fat intake is 30%), 75% of women and 63% of men reported being physically inactive, and 27% of adults (20-64 years) reported being above a healthy weight (body mass index greater than 25) in 1990.
- Young and single pregnant women gave birth to low birth weight babies at a higher rate than older and married pregnant women in Hamilton-Wentworth in 1994.
- Teen pregnancy rates increased in Hamilton-Wentworth from 43 pregnancies per 1,000 teens aged 15 to 19 years in 1989 to 50 pregnancies per 1,000 teens in 1994.
- The number of Hamilton-Wentworth children brought under protective care by the local children's aid societies increased from 4.3 per 1,000 children aged 0-18 years in 1996 to 4.8 per 1,000 children in 1997.
- Sixteen of the Region's 17 long-term care facilities had influenza outbreaks in the 1997-98 winter flu season.
- The City of Hamilton had the third largest increase (10%) in smog-related death rates from 1980 to 1991 when compared to other major Canadian cities.

Preface

The objectives of the Hamilton-Wentworth 1998 Health Issues Report are to:

1. Provide local councilors, health and social service planners and providers, educators, and students in Hamilton-Wentworth easy access to up-to-date community health information;
2. Facilitate the communication of community reports and studies on health topics related to the citizens of Hamilton-Wentworth, and;
3. Provide highlights of health issues using the existing community health information in Hamilton-Wentworth.

The Regional Municipality of Hamilton-Wentworth is made up of six area municipalities (the Cities of Hamilton and Stoney Creek, the Towns of Ancaster, Dundas and Flamborough, and the Township of Glanbrook).

The Hamilton-Wentworth Regional Public Health Department (RPHD) is one of seven public health units in Central West Ontario. The other six public health units are Brant, Haldimand-Norfolk, Halton, Niagara, Waterloo, and Wellington-Dufferin-Guelph (see map page 16).

Organization and Format of the Hamilton-Wentworth 1998 Health Issues Report

The Hamilton-Wentworth 1998 Health Issues Report reflects the Mandatory Health Programs and Services Guidelines as prepared by the Ontario Ministry of Health, Public Health Branch (1997). The health issues covered in this Report were

decided upon with RPHD staff and with local community agencies. Data from various sources were analyzed, focusing on current key public health issues in our community. A standard format was adopted for all sections of the document.

Data Sources

Multiple data sources were used in this Report including RPHD program data (for example, Reportable Disease Information System [RDIS] and Immunization Record Information System [IRIS]), Central West Health Planning Information Network, Ontario Health Survey, Census Canada, Health Planning System [HELPS, Ontario Ministry of Health], 1995 Hamilton-Wentworth Health Survey, and Health Priorities Analysis Unit. Additional information on health issues in Hamilton-Wentworth

can be found in the Fact Book on Health in Hamilton-Wentworth and Infobook: Infowatch Series: Community Health Newsletter. Portions of fact sheets reproduced in this Report were taken from the Vision 2020 newsletter of the Sustainable Development Task Force for the Regional Municipality of Hamilton-Wentworth. Citations for data sources used in this Report can be obtained through the RPHD programs in a "cited" copy of this Report.

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Population Characteristics for Hamilton-Wentworth, 1996

and Area in Square Kilometers:

1,113

Population by Literacy Level:

Great difficulty reading	27%
Read but not well	33%
Basic skill level	30%
High level of literacy	10%

Population by Highest Level of Schooling*:

Less than grade 9	42,625
Grades 9 to 13	145,190
Trades certificate or diploma	14,655
Other non-university training	94,345
Without certificate/diploma	25,460
With certificate/diploma	68,885
University	72,295
Without degree	29,520
With certificate/diploma	15,120
With certificate/diploma	14,400
Bachelor's degree or higher	42,770

Population by Municipality:

Ancaster	23,403
Dundas	23,125
Flamborough	34,037
Glanbrook	10,564
Hamilton	322,352
Stoney Creek	54,318

Population by Mother Tongue:

English	349,460
French	6,265

Official languages total:

Italian	21,505
Polish	9,135
Portuguese	7,360
German	6,530
Croatian	5,575
Chinese	4,870
Spanish	4,005
Dutch	3,915
Serbian	3,625
Hungarian	3,175
Ukrainian	3,110
All others	27,525

Non-official languages total:

100,330

Population by Total Household Income:

Under \$10,000	12,735
\$10,000 - \$19,999	29,990
\$20,000 - \$29,999	23,340
\$30,000 - \$39,999	20,435
\$40,000 - \$49,999	18,615
\$50,000 - \$59,999	17,885
\$60,000 - \$69,999	14,270
\$70,000 and over	41,140

Population by Marital Status*:

Never married	107,755
Legally married	200,550
Separated but still legally married	11,705
Divorced	26,835
Widowed	27,460

Occupied Private Dwellings:

Own dwelling	112,190
Rent dwelling	66,230

Population of Never-Married Sons and/or Daughters Living at Home:

Under 6 years of age	36,350
6 - 14 years of age	55,575
15 - 17 years of age	16,395
18 - 24 years of age	29,165
25 years of age and older	15,435

Population of Lone-Parent Families:

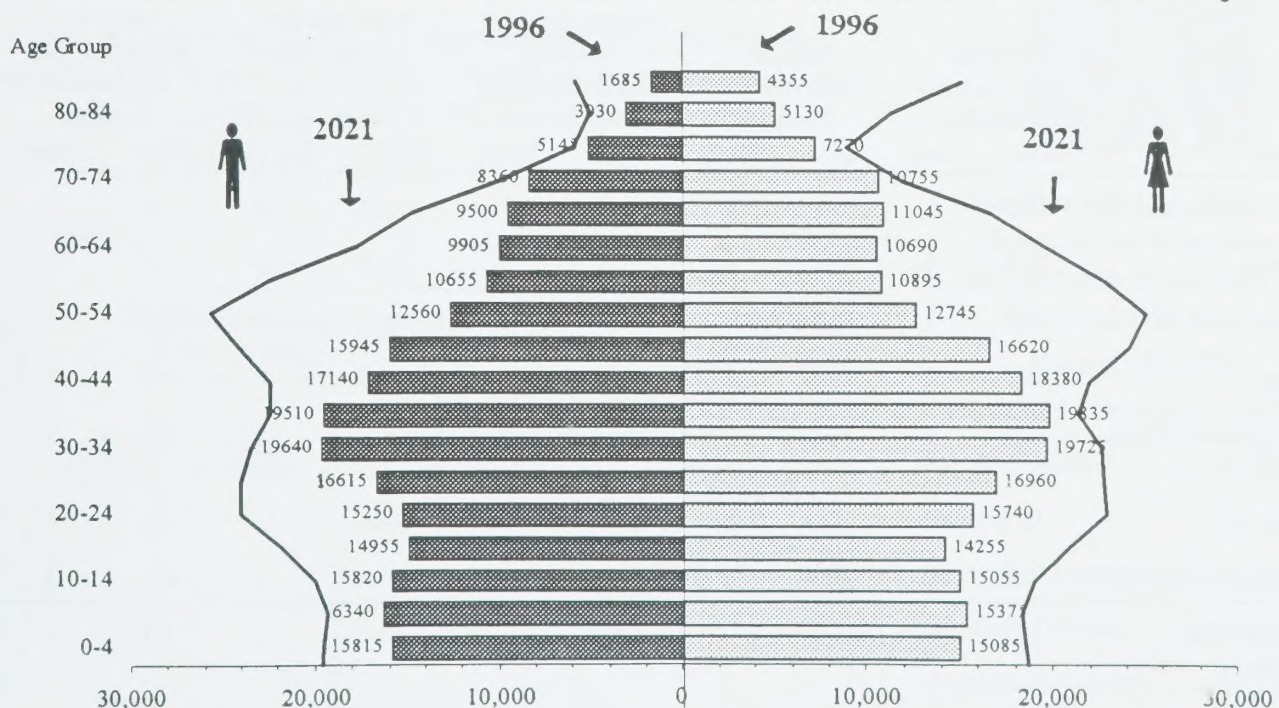
Male parent	2,965
Female parent	16,755
Total number of families	127,960

Citizenship Status of Population:

Canadian citizenship	436,415
Other than Canadian	26,140

*15 years of age and older

Chart 1. Age and Sex Population Pyramid for Hamilton-Wentworth 1996 and 2021 Projection

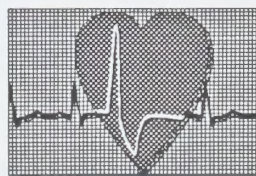


Population Size of Five Year Age Groups
Source: 1996 Census & Ministry of Finance Population Projections.

Heart Disease in Hamilton-Wentworth

Cardiovascular disease refers to a group of diseases of the circulatory system including heart disease and stroke. Heart attack and chest tightness (angina) are the main forms of heart disease.

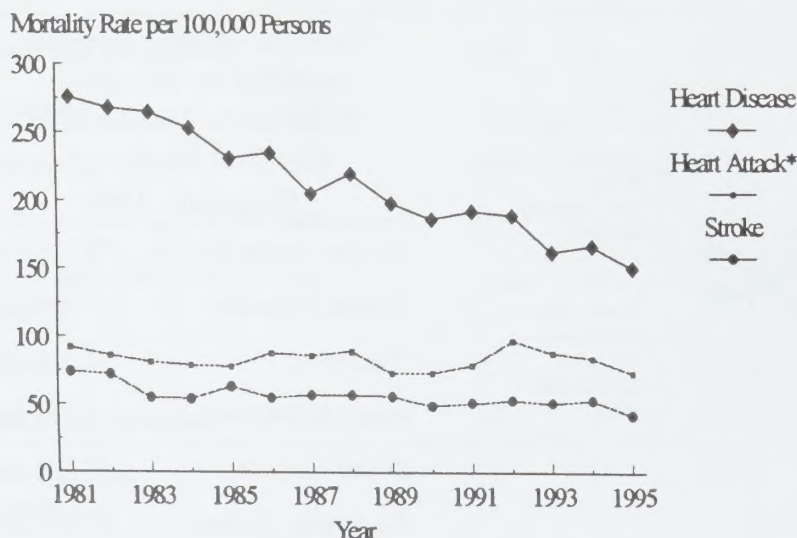
- Cardiovascular disease is the number one killer of both men and women in Hamilton-Wentworth and Central West Ontario.
- Each year approximately 1,500 Hamilton-Wentworth residents die from cardiovascular disease.
- In 1995, cardiovascular disease was the leading cause of death accounting for 1,445 or 37% of all deaths in Hamilton-Wentworth (40% in Central West Ontario). Of these deaths, 60% (871) were due to heart disease, 17% (250) were due to stroke, and the remaining 23% (324) were due to other diseases of the heart and blood vessels.
- Death rates from cardiovascular disease increase dramatically with age. Males experience two to three times the average death rate of females in almost all age categories. After age 85, the male and female death rates are similar.



In 1995, cardiovascular disease was the largest contributor to hospital separations (defined as either discharge from hospital due to death, return to home, transfer to another facility or patients signing themselves out) in Hamilton-Wentworth, accounting for 14% of all separations (14% in Central West Ontario). Cardiovascular disease accounts for 15% of all hospital days stayed in both Hamilton-Wentworth and Central West Ontario.

- Potential years of life lost (PYLL) is a measure of premature death calculated by summing all of the years of life lost for all individuals that died before the age of 75 years. In 1995, cardiovascular disease was the second (after cancer) leading cause of PYLL in Hamilton-Wentworth accounting for 18% of all PYLL (19% in Central West Ontario). Potential years of life lost from cardiovascular disease was much greater for males than females indicating that it is responsible for killing more younger aged men and older aged women.

Chart 4. Age-Standardized* Mortality Rates for Heart Disease and Stroke in Hamilton-Wentworth, 1981-1995



*Mortality rates were age-standardized to the 1991 Ontario population.

*Heart attack is a subcategory of heart disease.

Source: Ontario Ministry of Health, Mortality Database.



In Hamilton-Wentworth, between 1981 to 1995, death rates for heart disease and stroke declined (see Chart 4), as they did across Canada.

- Population changes in behavioural risk factors such as reduction in smoking, biomedical risk factors such as better treatment of high blood pressure, and physical environmental conditions such as decreased exposure to second-hand smoke, have all contributed to the decline.

Cancer in Hamilton-Wentworth

Cancer is the leading cause of premature death among men and women in Hamilton-Wentworth, and the second leading cause of death after cardiovascular disease. Cancer represents a group of diseases caused by unregulated growth of abnormal cells in various body sites.

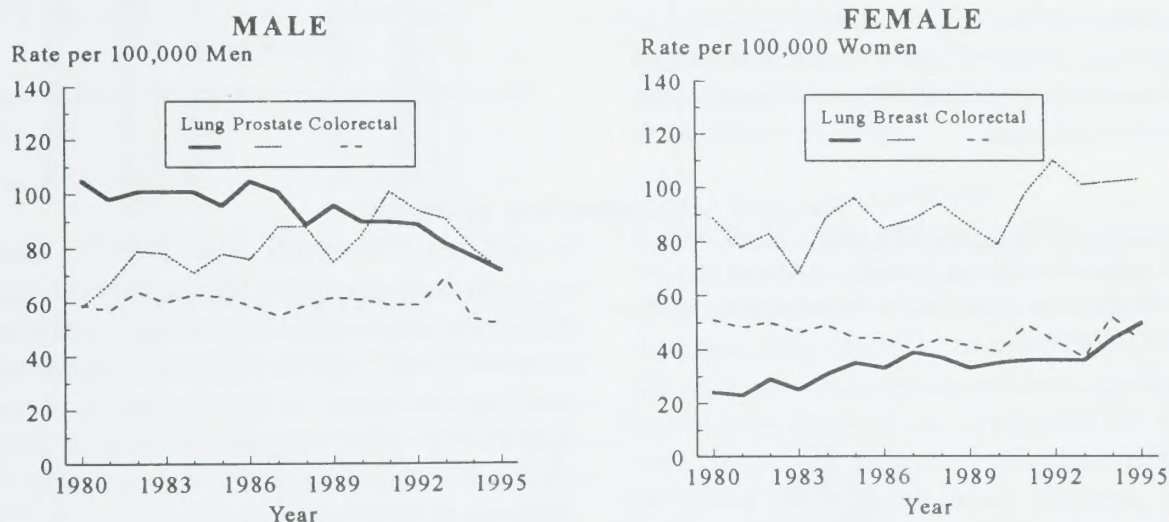
- In 1995, cancer was responsible for 1,076 deaths or 27% of all deaths in Hamilton-Wentworth compared to 28% in Central West Ontario.
- In 1995, cancer was responsible for 30% of all potential years of life lost (PYLL) in Hamilton-Wentworth (31% in Central West Ontario).
- PYLL is a measure of premature death calculated by summing all of the years of life lost for all individuals that died before the age of 75 years.
- Together, lung, colorectal, breast and prostate cancer accounted for 49% of all cancer deaths in Hamilton-Wentworth. Although more men die from cancer every year, female specific cancers occur earlier in life.



In Hamilton-Wentworth, prostate cancer is the most common cancer in men followed by lung and colorectal cancer (see Chart 5). Recently, the incidence and death rates of lung cancer in males has declined. This trend is likely due to decreased tobacco use among men.

- In Hamilton-Wentworth, breast cancer is the most common cancer in women followed by lung and colorectal cancer (see Chart 5). Lung cancer has joined breast cancer as a leading cause of cancer death among Hamilton-Wentworth women. The increase in lung cancer incidence and death in women corresponds to increased tobacco use among women.
- Colorectal cancer is the third most common cancer site in both men and women. The incidence rate of colorectal cancer is slowly declining. This trend may be due to a decrease in the consumption of fats and an increase in fibre intake.

Chart 5. Age-Standardized* Incidence Rates for Selected Cancer Sites by Sex, Hamilton-Wentworth, 1980-1995



*Age-standardized to the 1991 Ontario population. Source: Ontario Ministry of Health, Ontario Cancer Incidence Database.

Cancer death rates increase with age. Of all cancer deaths from 1986 to 1995 in Hamilton-Wentworth, 70% occurred among those 65 years of age and over. But, cancer surpassed cardiovascular disease as the leading cause of death for adults under 65 years of age in Hamilton-Wentworth in 1995. Cancer also affects children and younger adults. In

Hamilton-Wentworth, cancer is the second leading cause of death (after injuries) in children aged 1 to 14 years in 1995. Modifiable risk factors associated with cancer include tobacco use and exposure to second-hand smoke, high fat diets, excessive alcohol consumption, and occupational/environmental exposure to cancer causing agents.

Injuries in Hamilton-Wentworth



In Hamilton-Wentworth, injury was the leading cause of death in children and youth and the fourth leading cause of death for people of all ages. Injuries accounted for 209 deaths, 2,672 hospital admissions, 34,315 days

in hospital, and an estimated \$21,755,710 of hospital costs in Hamilton-Wentworth in 1995. Seniors had the highest rate of hospitalization and death due to injury compared to other age groups in Hamilton-Wentworth and Central West Ontario in 1995.

Deaths Due to Injury



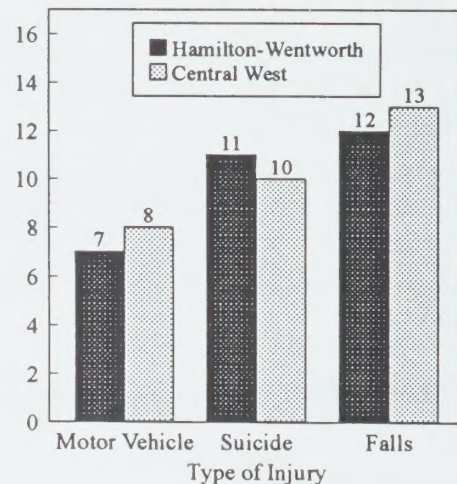
In 1995, injury deaths were most often caused by falls (26%), suicide (23%) and motor vehicle collisions (15%) in Hamilton-Wentworth.

In Hamilton-Wentworth, from 1992-94, motor vehicle collisions were a major cause of injury death for all ages, whereas deaths due to falls occurred more frequently in those aged 65 years and over, and suicides more frequently in those aged 35 to 64 years. Similar trends were found for Ontario.

Comparing 1989 and 1995 data for Hamilton-Wentworth, the percent of injury deaths due to motor vehicle collisions decreased (23% to 15%), while the percent due to suicides remained constant (23%), and due to falls increased (21% to 26%).

In Hamilton-Wentworth, drinking and driving is still a concern. Of the 13,833 drivers involved in traffic collisions, 504 (3%) were reported by police as having consumed alcohol in 1993. Of these drunk drivers, 88% were male.

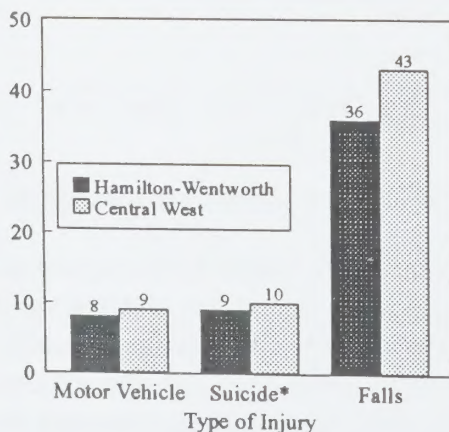
Chart 6A. Number of Deaths Due to Motor Vehicle Collisions, Suicides and Falls for Hamilton-Wentworth and Central West Ontario, 1995
Rate per 100,000 Persons



Source: Ontario Ministry of Health, Mortality Database.

Hospital Admissions Due to Injury

Chart 6B. Number of Hospital Admissions Due to Motor Vehicle Collisions, Suicide Attempts and Falls for Hamilton-Wentworth and Central West Ontario, 1994.
Rate per 10,000 Persons



*Attempted suicide data is for 1992. Source: Ontario Trauma Registry.

In Hamilton-Wentworth, from 1993-95, falls were the most frequent reason for hospitalization due to injury in residents aged 14 years and younger and 25 years and over. Motor vehicle collisions were the most frequent reason for hospitalization of residents aged 15 to 24 years. Attempted suicide was a major cause of hospitalization due to injury among residents aged 15 to 44 years.

Comparison between 1989 and 1995 for Hamilton-Wentworth show the percent of injury related hospital admissions due to motor vehicle collisions increased (8% to 12%), while the percent due to attempted suicides decreased (6% to 2%), and percent due to falls increased (25% to 61%). These data underestimates since they do not include injury from poisonings or overdoses and the late effects of other causes.

Tobacco Use and Substance Abuse in Hamilton-Wentworth



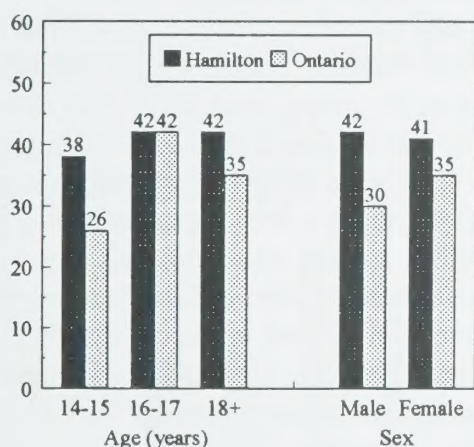
Tobacco use and abuse of substances such as alcohol and cannabis are behaviours associated with increased risk of illness, disease, disability and injury. In Hamilton-Wentworth, 25% of residents aged 12 years and over reported being daily or occasional cigarette smokers (27% of

males; 24% of females). Similar rates were reported for Ontario (25% overall; 28% of males; 22% of females) in 1996. In 1995, 10% of male and 3% of female Hamilton-Wentworth residents aged 18 years and older reported heavy drinking (14 drinks or more per week for males; nine drinks or more per week for females) within the past week.

Tobacco Use and Substance Abuse Among a Sample of Hamilton Secondary School Students

Self-reported tobacco use among secondary school students was higher in Hamilton than Ontario (see Chart 7).

Chart 7. Self-Reported Use of Tobacco at Least Once During the Past Year by Age and Sex, in Six of 21 Hamilton-Wentworth Secondary Schools (1,810 students)¹ Compared to Ontario Students², 1997
Percent of Students



¹Hamilton students in grades 10, 11, 12, and OAC - 1997 Student Tobacco, Alcohol, and Cannabis Use in Hamilton Survey.

²Ontario students in grades 9, 11, and 13 - 1997 ARF Survey.

- Youth tobacco use and substance abuse behaviours often continue into adulthood. In Hamilton, 33% of male and 32% of female students reported smoking daily. Of these smokers, 24% of males and 14% of females tried a cigarette by age 10.

Second-hand Smoke

Second-hand smoke contains over 4,000 chemicals, at least 40 of which are known to cause human cancers. Nonsmokers are at risk through their exposure to second-hand smoke from exhaled smoke and smoke from the burning end of cigarettes.

Each year, an average of 50 nonsmokers in

- In Hamilton, 54% of students reported buying their own cigarettes, 13% had someone else buy their cigarettes, 4% had a friend buy them, 4% got them from home, and 25% used some other method of getting cigarettes.

Alcohol

- In Hamilton, 17% of male students reported using alcohol *at least twice a week*. This is about double compared to Hamilton female (6%) and Ontario male (8%) students.
- Among Hamilton and Ontario students, alcohol use was more common in the 16 years and over age groups compared to the 14 to 15 year olds.
- In Hamilton, 46% of male students and 37% of female students reported being to a party where someone they knew (including themselves) had driven after drinking.

Cannabis

- Cannabis cigarettes yield up to 50% more tar and cancer-causing agents than tobacco cigarettes.
- A larger percent of Hamilton students (20%) reported using cannabis *10 times or more during the past year* than Ontario students (14%).
- In Hamilton, frequent use of cannabis (10 times or more during the past year) was reported by 25% of males and 14% of female students, 18% of students aged 14 to 15, and 20% of students aged 16 to 17 and aged 18 years and over.

Hamilton-Wentworth die from exposure to second-hand smoke. In Hamilton-Wentworth, 82% of adults reported being concerned about exposure to second-hand smoke, and 71% strongly or somewhat supported regulations to make all enclosed public places smoke-free.

Injuries in Hamilton-Wentworth



In Hamilton-Wentworth, injury was the leading cause of death in children and youth and the fourth leading cause of death for people of all ages. Injuries accounted for 209 deaths, 2,672 hospital admissions, 34,315 days

in hospital, and an estimated \$21,755,710 of hospital costs in Hamilton-Wentworth in 1995. Seniors had the highest rate of hospitalization and death due to injury compared to other age groups in Hamilton-Wentworth and Central West Ontario in 1995.

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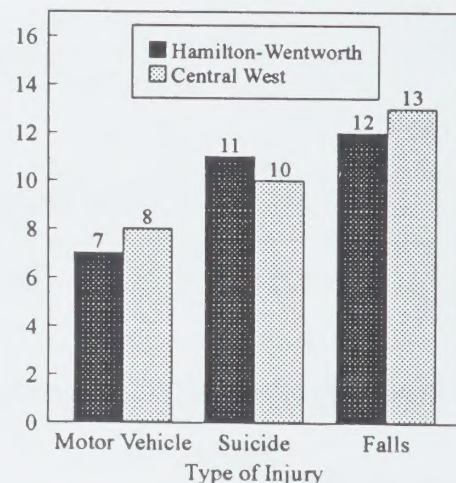
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Comparing 1989 and 1995 data for Hamilton-Wentworth, the percent of injury deaths due to motor vehicle collisions decreased (23% to 15%), while the percent due to suicides remained constant (23%), and due to falls increased (21% to 26%).

In Hamilton-Wentworth, drinking and driving is still a concern. Of the 13,833 drivers involved in traffic collisions, 504 (3%) were reported by police as having consumed alcohol in 1993. Of these drunk drivers, 88% were male.

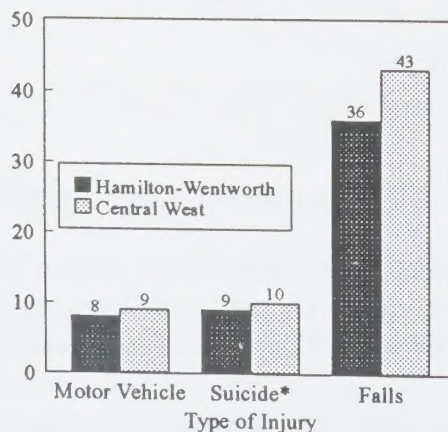
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Comparison between 1989 and 1995 for Hamilton-Wentworth show the percent of injury related hospital admissions due to motor vehicle collisions increased (8% to 12%), while the percent due to attempted suicides decreased (6% to 2%), and percent due to falls increased (25% to 61%). These data underestimates since they do not include injury from poisonings or overdoses and the late effects of other causes.

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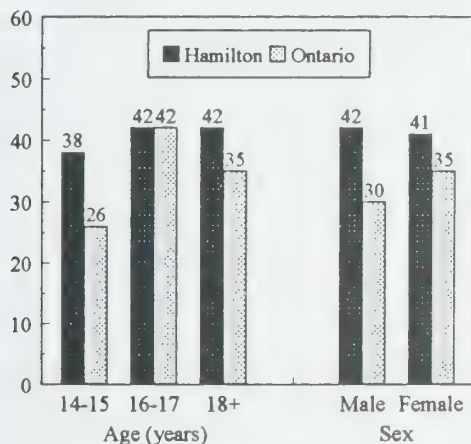


Tobacco use and abuse of substances such as alcohol and cannabis are behaviours associated with increased risk of illness, disease, disability and injury. In Hamilton-Wentworth, 25% of residents aged 12 years and over reported being daily or occasional cigarette smokers (27% of

males; 24% of females). Similar rates were reported for Ontario (25% overall; 28% of males; 22% of females) in 1996. In 1995, 10% of male and 3% of female Hamilton-Wentworth residents aged 18 years and older reported heavy drinking (14 drinks or more per week for males; nine drinks or more per week for females) within the past week.

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Hamilton-Wentworth die from exposure to second-hand smoke. In Hamilton-Wentworth, 82% of adults reported being concerned about exposure to second-hand smoke, and 71% strongly or somewhat supported regulations to make all enclosed public places smoke-free.



Healthy eating and regular physical activity promote healthy weight and help prevent heart disease, cancer, diabetes, osteoporosis and obesity. People who

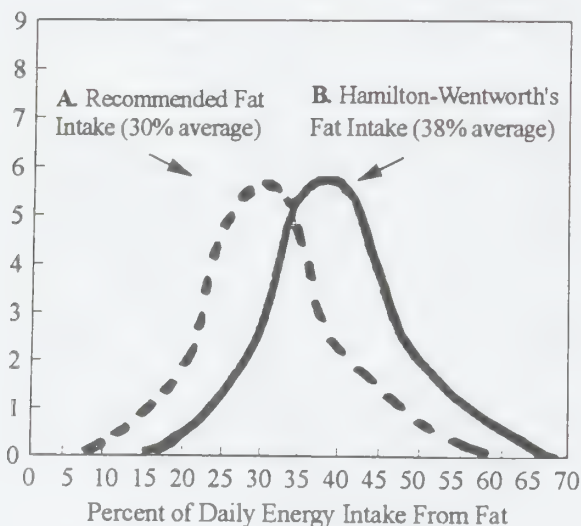
take part in regular physical activity tend to have lower medical care and sick leave costs over their life span, which reduces the pressure on the annual cost of health care and absenteeism to the work force.

It is recommended that our diet include no more than 30% of energy, or calories, from fat. Hamilton-Wentworth residents aged 12 years and over reported an average of 38% of daily energy intake from fat in 1990 (see Chart 8). Women were closer to the recommended level of fat intake with a self-reported average of 37% compared to men (39%).

If all residents decreased their fat intake by a small amount, Hamilton-Wentworth's average fat intake would decrease, moving curve A (Chart 8) to the left and closer to the recommended average fat intake of 30% (curve B). This shift would result in a potentially large decrease in cardiovascular disease risk in Hamilton-Wentworth.

Chart 8. Distribution of Hamilton-Wentworth Residents, Aged 12 Years and Over, by Percent Daily Energy Intake from Fat, 1990

Percent of Hamilton-Wentworth Residents

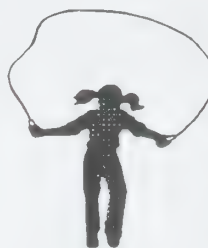


Source: 1990 Ontario Health Survey.

- In Hamilton-Wentworth, 75% of women and 63% of men reported being inactive, and 27% of adults aged 20 to 64 years reported being above a healthy body weight (body mass index above 25) in 1990.

Being overweight increases the likelihood of having excess body fat and the risk of developing chronic diseases. Healthy eating and regular physical activity are key to preventing or treating overweight.

- Reported barriers to a healthier diet include a lack of time to plan low-fat meals and snacks, the perception that reducing fat content in food will reduce its flavour, and the fact that it is difficult to eat a healthy diet.



Physical Activity, Nutrition and Dental Health Among Children

The Canadian Fitness and Lifestyle Research Institute, reported two-thirds of Canadian children are not sufficiently physically active for optimal growth and development

and an estimated 25% are obese - a number which has doubled in the past 20 years.

To be ready to learn school children need to be adequately fed. Hunger among school children was identified as an important local issue. For example, one Hamilton school found that 43% of children in grades 1 to 5 reported being hungry before morning recess. Of these children, 84% reported having eaten breakfast before coming to school that day. Local school and community-based children's nourishment programs have been initiated in response to this issue.

Dental disease can also impact a child's readiness to learn. Hamilton-Wentworth ranks 9th out of the 42 Ontario public health units for the percent of children with serious untreated dental problems. In 1996, 1,417 children in dental and financial need of urgent treatment were seen by the Dental Division of RPHD costing \$312,500. This was covered by the Ontario Ministry of Health through the Children In Need of Treatment Program.

Emergency Food Access

According to the Canadian Association of Food Banks the estimated number of people using Canadian food banks has increased by 104% from 329,000 in March 1989 to 669,877 in March 1997. Locally, 14,657 individuals used greater Hamilton area food bank services in March 1998. Of these, 36% (5,274) were children and 76% report social assistance as their main source of income.

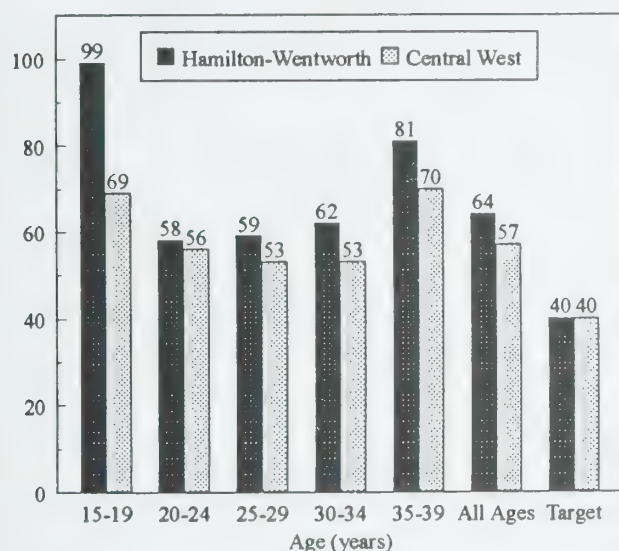


Low Birth Weight Babies

Birth weight is an indicator of a population's health. Low birth weight (less than 2,500 grams) babies are generally at increased risk of illness, disability and death. Research has shown that low birth weight and premature birth (less than 37 weeks gestation) account for approximately three-quarters of deaths within the first 28 days of a baby's life and neonatal intensive care costs of \$1,500 a day or more.

Social factors such as poverty and low education levels, and maternal lifestyle factors such as diet, smoking and substance use during pregnancy are associated with low birth weight. Pregnant teens are more likely to have low birth weight babies than older pregnant women.

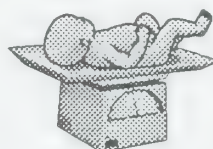
Chart 9. Number of Low Birth Weight Babies (less than 2,500 gm) by Maternal Age for Hamilton-Wentworth and Central West Ontario, 1994
Rate per 1,000 Live Births



Source: Ontario Ministry of Health, Live Births Database.

Folic acid supplements before and during pregnancy can cut the risk of spina bifida and other neural tube defects by half. In Hamilton-Wentworth, there were five reported cases of neural tube defects in both 1992 and 1993 (8 per 10,000 births), and seven cases (11 per 10,000 births) in 1994 compared to Ontario rates of 9 cases per 10,000 births in both

In 1994, low birth weight babies were born at a higher rate in Hamilton-Wentworth than in Central West Ontario (see Chart 9). This was also the case for 1991 to 1993 (1991: 64 low birth weight babies per 1,000 live births in Hamilton-Wentworth vs. 51 per 1,000 in Central West Ontario; 1992: 60 per 1,000 vs. 54 per 1,000; 1993: 65 per 1,000 vs. 56 per 1,000; 1994: 64 per 1,000 vs. 57 per 1,000).



Reducing the low birth weight baby rate to 40 per 1,000 live births is the Ontario public health target for the year 2010.

- Mothers aged 15 to 19 years gave birth to the highest proportion of low birth weight babies in Hamilton-Wentworth in 1994 (see Chart 9).
- In Hamilton-Wentworth, the low birth weight baby rate for younger pregnant teens, aged 13 to 16 years (123 per 1,000 live births) was higher than for older pregnant teens, aged 17 to 19 years (94 per 1,000) in 1994.
- Similarly, in Central West Ontario, the low birth weight baby rate was 89 per 1,000 live births for teens aged 13 to 16 years and 67 per 1,000 live births for teens aged 17 to 19 years in 1994.
- Single pregnant women gave birth to low birth weight babies at a higher rate than married pregnant women in Hamilton-Wentworth (83 per 1,000 vs. 61 per 1,000) and Central West Ontario (69 per 1,000 and 52 per 1,000) in 1994. The same trend was found in 1993.

Prenatal class participants can change behaviour in both lifestyle choices and communication between partners and with their health care providers. The total number of women registered in prenatal classes offered by the Hamilton-Wentworth RPHD was 1,226 in 1997 and 1,200 in 1996.

Neural Tube Defects

1992 and 1993, and 8 per 10,000 births in 1994. In 1995 and in 1996, one newborn was admitted to hospital due to a neural tube defect in Hamilton-Wentworth (Central West Ontario, 1995: 17 newborns; 1996: 10 newborns). Decreasing the prevalence of neural tube defects by 25% by the year 2010 is the Ontario public health target.

Sexual Health in Hamilton-Wentworth

Teen Pregnancy

Teen pregnancy is closely connected to social-cultural factors such as poverty and unemployment, family factors such as a family history of teenage parenting, and intrapersonal factors such as self-esteem, depression, substance use, history of sexual abuse and low interest in school. Teen mothers and their infants are at increased risk of poor health outcomes such as toxemia, premature birth and low birth weight.



The 1976 introduction of Ontario sexual health programs saw the Hamilton-Wentworth teen pregnancy rate decrease by 30% from 62 pregnancies per 1,000 teens aged 15 to 19 years in 1976 to 43 per 1,000 in

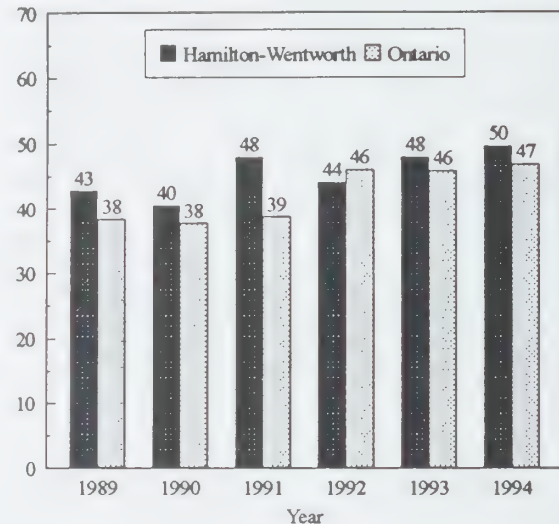
1989. However, from 1989 to 1994 the rate increased each year in Hamilton-Wentworth and Ontario (see Chart 10). This rising trend, seen throughout Canada, parallels the country's economic recession and rising poverty rates.

- In 1994, 728 teens became pregnant in Hamilton-Wentworth which resulted in 374 babies. Of these babies, 65% were born to single teens.
- The Hamilton-Wentworth teen fertility rate (number of live births per 1,000 teen women) increased from 24 per 1,000 in 1989 to 26 per 1,000 in 1994.

- In 1994, of those Hamilton-Wentworth teens who gave birth, 20% (73) gave birth for at least their second time (16% or n=59 in 1993).

Chart 10. Number of Pregnancies for Teens Aged 15-19 Years, Hamilton-Wentworth and Ontario, 1989-1994

Pregnancy Rate per 1,000
Teens Aged 15-19 Years



Source: Ontario Ministry of Health.

Sexually Transmitted Diseases — All Ages

The incidence of four sexually transmitted diseases in Hamilton-Wentworth are reported below. Reduction of each disease rate could be achieved through safer sex practices.

- **Chlamydia** accounted for 85% (597) of all reported sexually transmitted diseases in Hamilton-Wentworth in 1997. There were 112 more reported cases in 1997 (a 23% increase) than in 1996.
- The 1997 incidence of chlamydia was higher in Hamilton-Wentworth than the province as a whole (128 versus 96 per 100,000 persons). The Ontario public health target rate for the year 2005 is 500 cases per 100,000 persons.
- Females represented 77% of all chlamydia infections in Hamilton-Wentworth for 1997. Of these female cases, 72% were 15 to 24 years of age (1,094 cases per 100,000 women aged 15-24 years).
- Females may have higher rates of chlamydia because

they are more likely to show symptoms and be tested than males.

- The incidence of **gonorrhea** declined in Hamilton-Wentworth from 51 per 100,000 persons in 1990 to 20 per 100,000 in 1997.
- There were no reported cases of **syphilis** in Hamilton-Wentworth in 1997 (In 1991, 1992 and 1993: 3 per 100,000 persons; 1994 and 1995: 1 per 100,000; 1996: less than 1 per 100,000).
- The incidence of **HIV** in Hamilton-Wentworth was 22 cases in 1990 and 25 cases in 1992 and dropped to 4 in 1996. In 1997, 23 new cases were reported (16 male, 7 female). Most new HIV cases were between the ages of 20 and 39 years.
- The most common reported risk factors for contracting HIV in Hamilton-Wentworth include for men, having sex with a male partner, and for women, sex with a HIV positive male partner.



Children and youth (19 years and younger) comprise 26% (n=122,700) of Hamilton-Wentworth's population. Healthy child development requires a variety of supportive and nurturing community environments including *caring, opportunity, harmonious* and *learning communities*. What follows are four indicators or "signals", each representing a type of community environment, which measure the health and well-being of children and youth in our community.

Caring Communities: Immunization Rates

Safe vaccines are available which effectively help control infectious diseases. Disease control, however, requires high levels of immunization coverage for all children. Diphtheria, tetanus and polio (DT-P) and measles, mumps and rubella (MMR) are vaccination programs required by law for children to attend organized day care and school. Each year the RPHD monitors the records of Hamilton-Wentworth students with the goal of increasing immunization rates.

- Among seven year old students, 91% had complete MMR records in 1997, which included a new requirement for two doses of measles vaccine. Immunization coverage for DT-P is more difficult to achieve, however in 1996, 95% of seven year old children were up-to-date with their DT-P shots.
- Among 17 year old students, 96% had complete MMR records in 1997 as compared to 91% in 1996, 70% in 1995, and 81% in 1994.

Learning Communities: Reading by Grade 3

Basic literacy is most intensely acquired by Grade 3. Literacy is a skill considered fundamental for continued learning and future success. Factors which may influence a school board's reading rates include percent of English as a second language (ESL) students. For instance, 12% of Hamilton school board students are classified as ESL students compared to 7% for the Hamilton-Wentworth Catholic board and 3% for the Wentworth board.

In 1997, 55% of tested Grade 3 students at both Hamilton Public and Hamilton-Wentworth Catholic schools performed within or above expected ranges for their ages as compared to 61% at the Halton

Catholic board, and 63% at both the Wentworth Public and Halton Public boards. All local boards performed better than the Ontario rate of 50%

Opportunity Communities: Employment Rates

Youth employment yields benefits such as increased self-reliance and self-respect, and measures the proportion of persons who are more likely to have favourable living and working conditions.

- In 1996, 88% of the labour force aged 15 to 24 years were employed as compared to 86% in 1995, 81% in 1993, and 83% in 1991.
- Half of those working were employed full-time, while the other half were employed part-time (less than 30 hours per week). Youth who are employed on a full-time basis are likely not attending school.

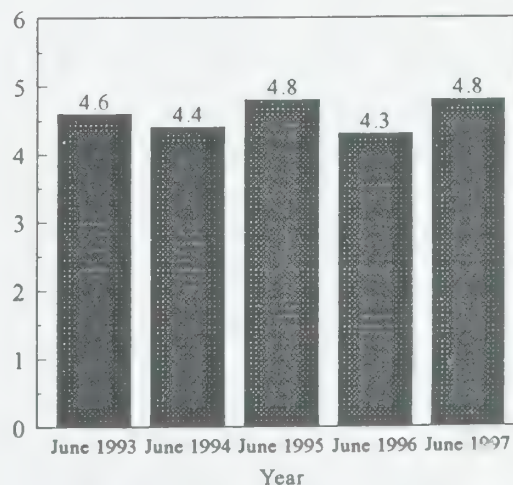
Harmonious Communities: Protective Care

Children are brought under protective care if they have suffered or they are at risk of suffering physical, sexual or emotional harm.



The number of children brought under protective care by the local children's aid societies increased from 1996 to 1997 (from 501 children to 556 children) (see Chart 11).

Chart 11. Number of Children Brought Under Protective Care Per 1,000 Children Aged 0-18 Years, Hamilton-Wentworth, 1993-1997*
Rate per 1,000 Children Aged 0-18 Years



*1996 census population was used to calculate June 1997 rate.
Source: CAS and CCAS of Hamilton-Wentworth.

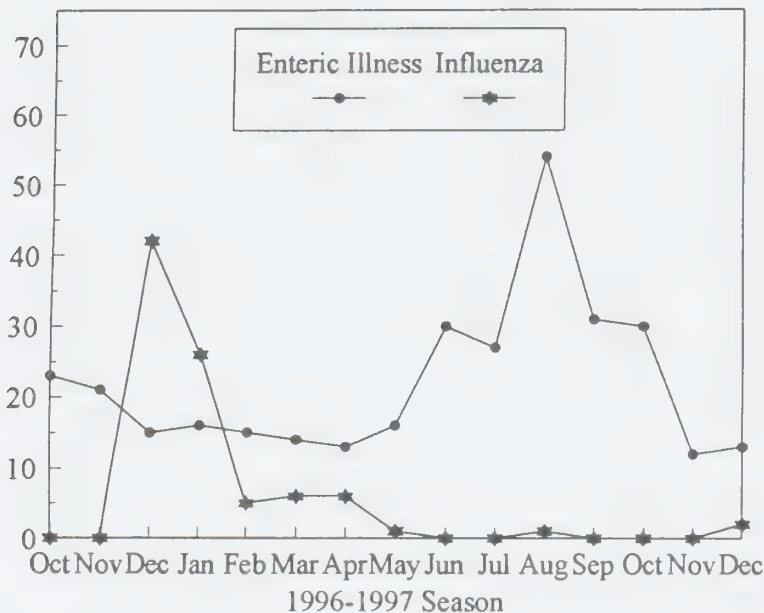
Communicable Diseases in Hamilton-Wentworth



In Ontario, the Health Promotion and Protection Act identifies over 60 infectious diseases which must be reported to the local health unit. Upon notification, the Hamilton-Wentworth RPHD may contact the patient for

further information and take action to prevent further spread of the disease. All information is computerized, monitored and kept confidential. In Hamilton-Wentworth, 561 confirmed cases of reportable infectious disease were reported in 1997, down from 598 in 1996.

Chart 12. Total Number of Confirmed Cases of Enteric Illness* and Influenza by Month, Hamilton-Wentworth, 1996-97 Season
Total Number of Confirmed Cases



* Campylobacter and salmonella only. Source: RDIS

Infection Control in Institutions

Influenza is a contagious disease that can cause pneumonia and sometimes death among the elderly and those with heart and lung problems.

- Sixteen out of the region's 18 long-term care facilities had winter influenza outbreaks in 1997-98 compared to eight in 1996/97. In 1997/98, the flu virus was slightly different than anticipated, resulting in only partial protection by the vaccine.

Multi-drug resistant organisms such as Methacilin Resistant Staph Aureus (MRSA) are challenging to control. From June 1997 to March 1998:

- 596 new cases of MRSA were identified in Hamilton-Wentworth hospitals. Because bugs can develop resistance to antibiotics, we need to ensure appropriate antibiotics use as a community.

Enteric and Food-Borne Diseases

- In Hamilton-Wentworth, reports of enteric, or gastrointestinal disease totaled 483 in 1997, 473 in 1996, and 553 in 1995.
- Enteric illness is often unreported because the symptoms resemble common stomach and bowel problems. Campylobacter and salmonella are two enteric diseases that are spread by food or persons. Higher rates of illness are found in the summer due to factors such as poor refrigeration and cooking of barbeque and picnic foods (Chart 12).
- E. coli 0157:H7, also known as hamburger disease, is a serious enteric disease. In 1997, 17 cases (4 per 100,000 persons) of E. coli infection were reported in Hamilton-Wentworth compared to 25 in 1996, and 28 in 1995. (Central West Ontario and Ontario 1997 rates were both 4 per 100,000).

Vaccine Preventable Diseases

Pertussis, or whooping cough, can be a serious disease among very young children, and can lead to pneumonia, brain damage and even death. In 1997, there were 19 confirmed cases of pertussis, or 4 per 100,000 persons in Hamilton-Wentworth (Central West Ontario: 13 per 100,000; Ontario: 9 per 100,000).

- Control of diphtheria, polio, rubella and tetanus and now measles was successful in 1997, with no confirmed cases.

The hepatitis B immunization program resulted in 87% of Grade 7 students receiving a full course of hepatitis B vaccine during the 1996/97 school year. A one time catch-up program for secondary school students resulted in 70% of those students receiving a full course of vaccine in 1996/97.



Air Quality

Recent research shows that air pollution, or smog, leads to premature death in the City of

Hamilton.

- Hamilton had the third largest increase in its smog-related death rate from 1980 to 1991 compared to other major Canadian cities.
- On heavy smog days, the death rate in Hamilton increased 10% from 8.5 people to 9.4 people per day. The City of Hamilton ranks behind Quebec City (11%) and London, Ontario (11%).

Water Safety

- In Hamilton-Wentworth, 1 in 10 residents rely on groundwater supplies for their drinking water.
- Research shows that approximately 30% of wells in Ontario fail to meet safe drinking water standards.



Tobacco Control Act

Under the Tobacco Control Act, it is illegal to sell tobacco to persons under 19 years of age. In Hamilton-Wentworth 18 retailers were convicted of selling tobacco to youth under the age of 19 years in 1997 compared to 14 in 1996.



Rabies Control

Under Provincial regulations, hospitals and doctors are required to report animal scratch or biting incidents to

their local public health unit.

- In Hamilton-Wentworth, 864 incidents were investigated and 36 residents were given rabies vaccine in 1997 compared to the 710 animal bites investigated in 1996. Similar numbers were found for other Central West Ontario districts with comparable populations.

Food Safety

As of July 1998, there were 4,863 food premises in Hamilton-Wentworth requiring a minimum of 8,799 inspections by the RPHD to meet Ministry of Health protocols. These numbers are higher than for other public health units in Central West Ontario.



- In Hamilton-Wentworth, 249 food complaint investigations resulted in 18 charges and closure of 26 premises in 1997 compared to nine charges and three closures in 1996.

Hamilton-Wentworth VISION 2020 Sustainable Community Initiative

The following environmental indicators are selected from VISION 2020; a local initiative that is monitoring our progress towards a sustainable community. Sustainable development is positive change which does not undermine the environment or social and health systems on which we depend. The following scores describe the 1993 to 1996 trend for each indicator:



- ✗ = Needs Improvement; Worse Than 1993
- ? = Hard to Say; Mixed Results
- ✓ = Making Progress; Moving Towards the Target

Transportation

- ✗ Annual transit ridership per capita
- ✓ Total length of bicycle routes

Natural Areas and Corridors

- ✓ Total length of hiking trails
- ✓ % significant natural areas protected

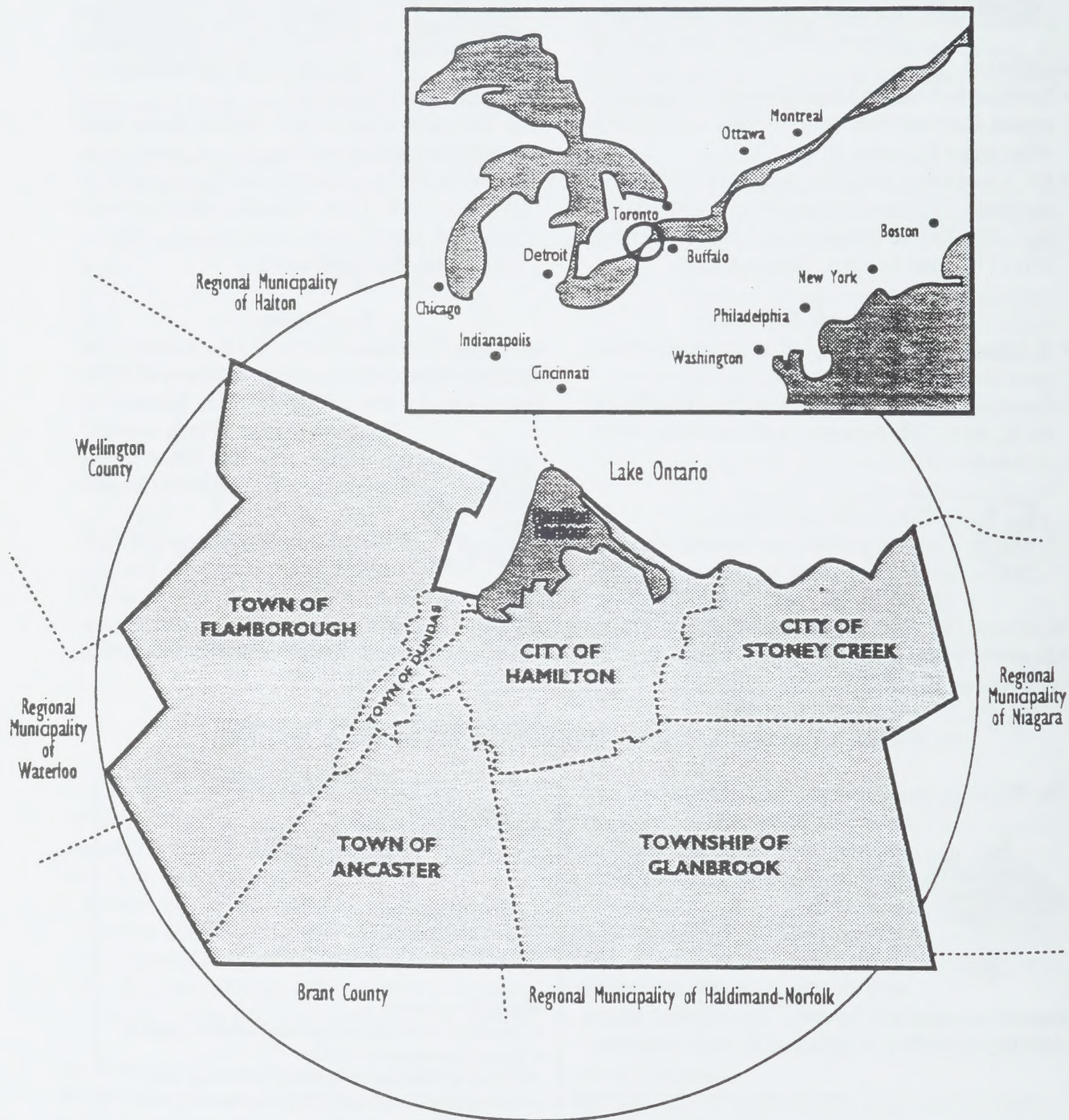
Water Resources

- ? Suspended solids discharged into Hamilton Harbour
- ✓ Water consumption - all uses
- ? Number of 'all beaches open for swimming' days
- ? Amount of road salt used on regional roads (rural)

Waste

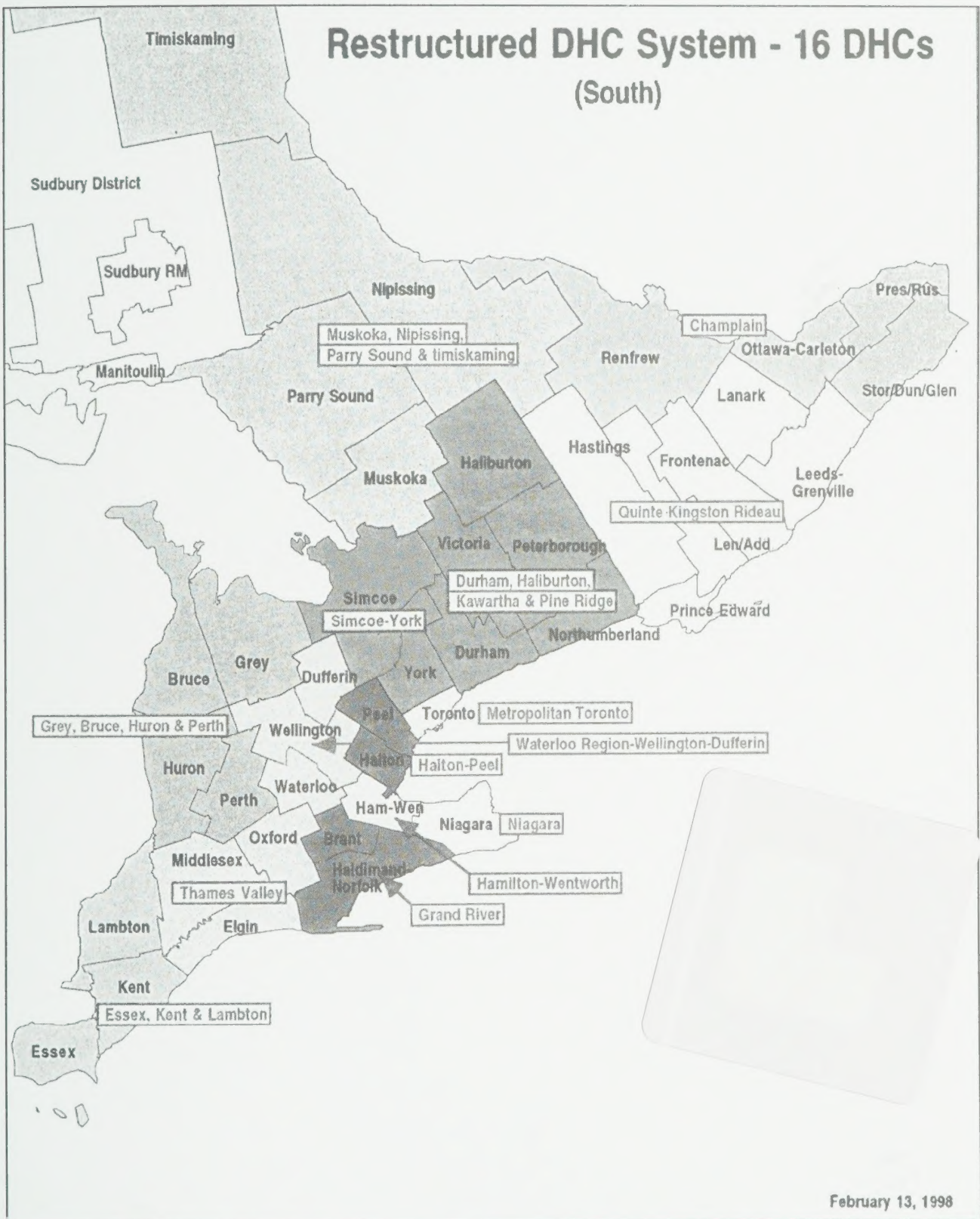
- ✓ Space used at landfill sites annually
- ✓ Annual users of hazardous waste depot

Regional Municipality of Hamilton-Wentworth



Source: The Regional Municipality of Hamilton-Wentworth. 1992 Annual Financial Report.

Restructured DHC System - 16 DHCs (South)



February 13, 1998



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